



Figure 1

ggcgcccgcc cggcccgccg ccggcccccg gctgcctccc ttctctctc cctctcttctc tcccttgcgc tgcctgcctc gctgcctc ggcgcatggg 100

ccccgcgcg gggcccgggg cctcgggcgc cctggcctcc ggggtccct agggccgggc gtggcgggg cagcccgcc tgaagcagcc tctgtaccc 200

accaccacca ccaccagggc cggcgggcgc ggtgcccgc agggacgggg ccttaggcgc tggcgATGG GGCCGTCCGG ATCGCGCCCG GCCTGGCGCT 300  
M G A U A I A P G L A L

GCTGCTCTGC TGCCCGGTGC TCAGCTCCGC GTACCGCTG GTGGATGCAG ATGACGTCAT GACCAAGAG GAGCAGATCT TCCTGCTGCA CCGCGCCAG 400  
L L C C P U L S S A V A L U D A D D U M T K E E Q I F L L H R A Q

GCCAGTGC AGAGCGGCT CAAAGAGTC CTGAGAGGC CAGCTGACAT AATGGAATCA GACAAAGGAT GGGCTTCTGC ATCCACATCA GGGAGCCTA 500  
A Q C Q K R L K E U L Q R P A D I M E S D K G W A S A S T S G K P K

AGAAAGAGAA GGCATCTGG AGCTCTACC CTGAGTCCGA GGAGGACAG GAGGTGCCA CTGGCAGCAG GCACCGAGGG CCGCCCTGCC TGCCCGAGT 600  
K E K A S G K L Y P E S E E D K E U P T G S R H R G R P C L P E W

GGACACATC CTITGCTGC CGCTGGGGG ACCAGGTGAG GTGGTGGCTG TGCCCTGTCC GACTACATT TATGACTTCA ATCACAAGG CCATGCCTAC 700  
D H I L C W P L G A P G E U U A U P C P D Y I Y D F N H K G H A Y

CGTCCTGTG ACCGCAATGG CAGCTGGGAG CTGGTGCCTG GACACACCG GAGGTGGGCC AACTACAGCG AGTGTGTCA GTTCCTGACC AACGAGCTC 800  
R R C D R N G S W E L U P G H N R T W A N Y S E C U K F L T N E T R

GTARACGGGA GGTGTTTGC CGCTGGGCA TGATCTACAC CGTGGGCTAC TCCGTGTCCG TGGCTCCCT CACCGTGGC GGTCTATCC TGGCTACTT 900  
E R E U F D A L G M I Y T U G Y S U S L A S L T U A U L I L A Y F

CAGCGGCTG CAGTCACAC GCACTACAT CCACTGGCAG CTGTCTGTCT CTTCATGCT TCGCGCCGTG AGCATCTCC TCAGGAGCG GGTCTCTAC 1000  
R A L H C T R N Y I H M H L F L S F M L R A U S I F U K D A U L Y

TCGGGCGCA CGCTGACGA GGCCGAGCG CTCACGAGG AAGAGCTGC CGCTGTCC CAGGACCC CCGCGCCAC CCGCGCCGC GGTACGCGG 1100  
S G A T L D E A E R L T E E E L R A I A Q A P P P P T A A A G Y A G

GCTGCAGGT AGCTGTACC TTCTCTCTT ATTTCTTGC CACCACTAC TACTGGATC TGGTGGGCG GTGTACCTG CATAGTCTCA TCTTCATGG 1200  
C R U A U T F F L Y F L A T N Y Y W I L U E G L Y L H S L I F M A

CTTCTTCTA GAGAGAGT ACCTGTGGG CTTCAGGTC TTCGGTGGG GTCTGCCCG GTCTTCCTG GTGTGTGGG TCAGGCTGAG AGCCACCTG 1300  
F F S E K K Y L W G F T U F G W G L P A U F U A U W U S U R A T L

GGCAACAGG GGTGCTGGG CTGAGCTCC GGGACACAG AGTGATC AT CAGGTGCC ATCTGACCT CTATGTGCT CAATTCATC TTGTTATCA 1400  
R N T G C W D L S S G N K K W I I Q U P I L A S I U L N F I L F I N

ACATGCTCCG GTGTGCTCC ACAGAGTGC GGGAGACCA TGCCGCGCG GTGTACACG GCGAGCAGT CCGGAGCTG CTCACATCCA CACTGGTGT 1500  
I U R U L A T K L A E T N A G A C D T A Q Q Y A K L L K S T L U L

CATGCGCTC TTTGGGCTC ACTACATCT CTTCATGGC AGCCCTAC CAGAGTCTC AGGGACGCTC TGGCAGTCC AGATGCACTA CAGATGCTC 1600  
M P L F G U H V I U F M A T P Y T E U S G T L W Q U Q M H Y E M L

TTCACCTCT TCCAGGGAII TTTTGTCC ATCATATCT GTTCTGCA TGGCGAGGTA CAGGCGGAGA TCAAGAAATC CTGAGGCCG TGGACACTGG 1700  
F M S F Q G F F U A I I Y C F C N G E U Q A E I K K S W S R W T L A

CCCTGGACTT CAGCGCAG GCGCGAGTG GAGGAGCAG TTACAGTAC GCGCCGATG GTGTCTCAC GAGCGTGACC AACGTAGCC CCGCGCGGG 1800  
L D F K R K A R S G S S S Y S Y G P M U S H T S U T N U G P R A G

ACTTGGCTG CCGCTCAGC CCGCGCTGT GCGCGCGCT GCGGCCACCA CACCGCCAC CACCAACGGC CACCCCCGA TCCGCGGCA CACCAAGCA 1900  
L G L P L S P A L L P A A A A T T T A T T N G H P P I P G H T K P

GGGCCCCGA CCTCCCGC CACACCACT GCGCGGCTG CTCCAGGA CGATGGGTC CTCACGGCT CTGCTGGG GCTGACGAG GAGGCTCCG 2000  
G A P T L P A T P P A T A A P K D D G F L N G S C S G L D E E A S A

CGCGGAGCG GCCTCCCGC CTGCTCAGG AGGAGTGGG GACGGTATG TGATcgggg cctgtgccg ggttggact gtggacataa gggcgacag 2100  
P E R P P A L L Q E E W E T U M

acggaccaag agacaggcgt ttggacagt gccactcag ggttggggt gggagacaa aacaaaaaa aaaaaa 2177

Figure 2

dPTH1	ATGGGGCCG	CCCGGATCGC	CCCGGCTG	GCCTCTCT	CTCTGCTGCC	GTGCTCAGC	TCCGCTATG	CGCTG	75		
rPTH1	ATGGGGCCG	CCCGGATCGC	CCCGGCTG	GCCTCTCT	CTCTGCTGCC	GTGCTCAGC	TCCGCTATG	CGCTG	75		
mPTH1	ATGGGGCCG	CCCGGATCGC	CCCGGCTG	GCCTCTCT	CTCTGCTGCC	GTGCTCAGC	TCCGCTATG	CGCTG	75		
hPTH1	ATGGGGCCG	CCCGGATCGC	CCCGGCTG	GCCTCTCT	CTCTGCTGCC	GTGCTCAGC	TCCGCTATG	CGCTG	75		
dPTH1	GTGGATG	AGATGA	GTGAT	GACAAAGAG	GACAGAT	CTCTGCTGCA	CCGTGGCCAG	GCBCAATGTG	AAAAA	150	
rPTH1	GTGGATG	AGATGA	GTGAT	GACAAAGAG	GACAGAT	CTCTGCTGCA	CCGTGGCCAG	GCBCAATGTG	AAAAA	150	
mPTH1	GTGGATG	AGATGA	GTGAT	GACAAAGAG	GACAGAT	CTCTGCTGCA	CCGTGGCCAG	GCBCAATGTG	AAAAA	150	
hPTH1	GTGGATG	AGATGA	GTGAT	GACAAAGAG	GACAGAT	CTCTGCTGCA	CCGTGGCCAG	GCBCAATGTG	AAAAA	150	
dPTH1	CGGCTCAAG	AGGTCTGCA	GAGGCAGC	GACATAATGG	AATCAGACAA	AGGATGG	CTCTGCTGCA	CATCA	225		
rPTH1	CTGCTCAAG	AGGTCTGCA	GAGGCAGC	AACATAATGG	AGTCAGACAA	AGGATGG	CTCTGCTGCA	CATCA	225		
mPTH1	CTGCTCAAG	AGGTCTGCA	GAGGCAGC	AACATAATGG	AGTCAGACAA	AGGATGG	CTCTGCTGCA	CATCA	225		
hPTH1	CGGCTCAAG	AGGTCTGCA	GAGGCAGC	AACATAATGG	AATCAGACAA	AGGATGG	CTCTGCTGCA	CATCA	225		
dPTH1	GGGAAGCC	AGAAAG	AAAGCA	CTGGG	AAGTCTACC	CTGAGTCTAA	AGAGACAAG	GAGGTGCCCA	CTGGC	300	
rPTH1	GGGAAGCC	AGAAAG	AAAGCA	CTGGG	AAGTCTACC	CTGAGTCTAA	AGAGACAAG	GAGGTGCCCA	CTGGC	300	
mPTH1	GGGAAGCC	AGAAAG	AAAGCA	CTGGG	AAGTCTACC	CTGAGTCTAA	AGAGACAAG	GAGGTGCCCA	CTGGC	300	
hPTH1	GGGAAGCC	AGAAAG	AAAGCA	CTGGG	AAGTCTACC	CTGAGTCTAA	AGAGACAAG	GAGGTGCCCA	CTGGC	300	
dPTH1	AGCAGGC	AGAGGCG	CCCTG	CTGCC	GAGTGGGAC	ACATCTTTG	CTGGCCG	GTG	GGGGCACCAG	GTGAG	375
rPTH1	AGCAGGC	AGAGGCG	CCCTG	CTGCC	GAGTGGGAC	ACATCTTTG	CTGGCCG	GTG	GGGGCACCAG	GTGAG	375
mPTH1	AGCAGGC	AGAGGCG	CCCTG	CTGCC	GAGTGGGAC	ACATCTTTG	CTGGCCG	GTG	GGGGCACCAG	GTGAG	375
hPTH1	AGCAGGC	AGAGGCG	CCCTG	CTGCC	GAGTGGGAC	ACATCTTTG	CTGGCCG	GTG	GGGGCACCAG	GTGAG	375
dPTH1	GTGGTGGC	GTCC	GTGTC	GACTACATT	TATGACTTCA	ATCACAAAGG	CCATGCTAC	AGACGCTG	ACCGC	450	
rPTH1	GTGGTGGC	GTCC	GTGTC	GACTACATT	TATGACTTCA	ATCACAAAGG	CCATGCTAC	AGACGCTG	ACCGC	450	
mPTH1	GTGGTGGC	GTCC	GTGTC	GACTACATT	TATGACTTCA	ATCACAAAGG	CCATGCTAC	AGACGCTG	ACCGC	450	
hPTH1	GTGGTGGC	GTCC	GTGTC	GACTACATT	TATGACTTCA	ATCACAAAGG	CCATGCTAC	AGACGCTG	ACCGC	450	
dPTH1	AATGGCAGCT	GGGAG	GTGGT	CCCTGGG	CAC AACGGACGT	GGGCCAACTA	CAGCGAGTGT	GTCAAATTTCC	TACCC	525	
rPTH1	AATGGCAGCT	GGGAG	GTGGT	CCCTGGG	CAC AACGGACGT	GGGCCAACTA	CAGCGAGTGT	GTCAAATTTCC	TACCC	525	
mPTH1	AATGGCAGCT	GGGAG	GTGGT	CCCTGGG	CAC AACGGACGT	GGGCCAACTA	CAGCGAGTGT	GTCAAATTTCC	TACCC	525	
hPTH1	AATGGCAGCT	GGGAG	GTGGT	CCCTGGG	CAC AACGGACGT	GGGCCAACTA	CAGCGAGTGT	GTCAAATTTCC	TACCC	525	
dPTH1	AATGAGACT	CGGAACGGGA	GGTATT	TTGAC	CGCCTGGGA	TGAT	TACAC	CGTGGG	TAC	600	
rPTH1	AATGAGACT	CGGAACGGGA	GGTATT	TTGAC	CGCCTGGGA	TGAT	TACAC	CGTGGG	TAC	600	
mPTH1	AATGAGACT	CGGAACGGGA	GGTATT	TTGAC	CGCCTGGGA	TGAT	TACAC	CGTGGG	TAC	600	
hPTH1	AATGAGACT	CGGAACGGGA	GGTATT	TTGAC	CGCCTGGGA	TGAT	TACAC	CGTGGG	TAC	600	
dPTH1	TCCCTCAAG	GTGGT	GTGCT	CATCCT	AGCC	TATTTAGGC	GGCTGCACTG	CACCGCAAC	TACATCCACA	TGCAC	675
rPTH1	TCCCTCAAG	GTGGT	GTGCT	CATCCT	AGCC	TATTTAGGC	GGCTGCACTG	CACCGCAAC	TACATCCACA	TGCAC	675
mPTH1	TCCCTCAAG	GTGGT	GTGCT	CATCCT	AGCC	TATTTAGGC	GGCTGCACTG	CACCGCAAC	TACATCCACA	TGCAC	675
hPTH1	TCCCTCAAG	GTGGT	GTGCT	CATCCT	AGCC	TATTTAGGC	GGCTGCACTG	CACCGCAAC	TACATCCACA	TGCAC	675
dPTH1	CTGTTCTCTGT	CTTTATGCT	CGCGCCCG	AGCATCTTCG	TAAAGGACGC	GTGCTCTAC	CTGGG	CA	CGCTC	750	
rPTH1	ATGTTCTCTGT	CTTTATGCT	CGCGCCCG	AGCATCTTCG	TAAAGGACGC	GTGCTCTAC	CTGGG	CA	CGCTC	750	
mPTH1	ATGTTCTCTGT	CTTTATGCT	CGCGCCCG	AGCATCTTCG	TAAAGGACGC	GTGCTCTAC	CTGGG	CA	CGCTC	750	
hPTH1	CTGTTCTCTGT	CTTTATGCT	CGCGCCCG	AGCATCTTCG	TAAAGGACGC	GTGCTCTAC	CTGGG	CA	CGCTC	750	
dPTH1	GATGAGG	AGCGCCTCAC	AGAGGAAGAG	TTGCGCG	CA	TCGCA	CAGG	ACCCCCGCG	CCCACCG	CCGCC	825
rPTH1	GATGAGG	AGCGCCTCAC	AGAGGAAGAG	TTGCGCG	CA	TCGCA	CAGG	ACCCCCGCG	CCCACCG	CCGCC	812
mPTH1	GATGAGG	AGCGCCTCAC	AGAGGAAGAG	TTGCGCG	CA	TCGCA	CAGG	ACCCCCGCG	CCCACCG	CCGCC	812
hPTH1	GATGAGG	AGCGCCTCAC	AGAGGAAGAG	TTGCGCG	CA	TCGCA	CAGG	ACCCCCGCG	CCCACCG	CCGCC	824
dPTH1	GGC-----	-----	TACGG	GGCTG	CAGGTTGGT	GTGACCTTCT	TCCTT	ATT	CCTGGC	ACC	884
rPTH1	GGCCGCTGCC	GGCGTAGGG	TACGG	GGCTG	CAGGTTGGG	GTGACCTTCT	TCCTT	ATT	CCTGGC	ACC	887
mPTH1	CGCCGCTGCC	GGCGTTGGT	TACGG	GGCTG	CAGGTTGGC	GTGACCTTCT	TCCTT	ATT	CCTGGC	ACC	887
hPTH1	-----TGCC	-----GGT	TACGG	GGCTG	CAGGTTGGT	GTGACCTTCT	TCCTT	ATT	CCTGGC	ACC	887
dPTH1	CTACTGGATT	CTGGTGGAGG	GCTGTACT	CTACAG	CTC	ATCTTCATGG	CCTTT	TTCTC	AGAGAAGAAG	TACT	959
rPTH1	CTACTGGATT	CTGGTGGAGG	GCTGTACT	CTACAG	CTC	ATCTTCATGG	CCTTT	TTCTC	AGAGAAGAAG	TACT	962
mPTH1	CTACTGGATT	CTGGTGGAGG	GCTGTACT	CTACAG	CTC	ATCTTCATGG	CCTTT	TTCTC	AGAGAAGAAG	TACT	962
hPTH1	CTACTGGATT	CTGGTGGAGG	GCTGTACT	CTACAG	CTC	ATCTTCATGG	CCTTT	TTCTC	AGAGAAGAAG	TACT	962

Figure 2 con't

dPTH1	GTGGGGCTTC ACCGCTCTTG GCTGGGGTCT GCCGGGCTC TTCGTGGCTG TGTGGGTGAG GTAGAGGC ACCCT	1034
rPTH1	GTGGGGCTTC ACCATCTTG GCTGGGGTCT ACCGGCTGTC TTCGTGGCTG TGTGGGTGAG GTAGAGGA ACCCT	1037
mPTH1	GTGGGGCTTC ACCATCTTG GCTGGGGTCT GCCGGGCTC TTCGTGGCTG TGTGGGTGAG GTAGAGGA ACCCT	1037
hPTH1	GTGGGGCTTC ACCGCTCTTG GCTGGGGTCT GCCGGGCTC TTCGTGGCTG TGTGGGTGAG GTAGAGGT ACCCT	1037
dPTH1	GGCCAACACG GGGTGCTGGG ACTTGAGCTC GGGGACAAAG AAGTGGATCA TCCAGGTGCC CATCCTGGGC TCTAT	1109
rPTH1	GGCCAACACT GGGTGCTGGG ACTTGAGCTC GGGGACAAAG AAGTGGATCA TCCAGGTGCC CATCCTGGGA TCTGT	1112
mPTH1	GGCCAACACT GGGTGCTGGG ACTTGAGCTC GGGGACAAAG AAGTGGATCA TCCAGGTGCC CATCCTGGGA TCTGT	1112
hPTH1	GGCCAACACG GGGTGCTGGG ACTTGAGCTC GGGGACAAA AAGTGGATCA TCCAGGTGCC CATCCTGGGC TCCAT	1112
dPTH1	TGTGCTCAAC TTCATCTTCT TCATCAATAT CTTCCGGGTG CTGCCAQA AGCTTCGGGA GACCAATGCG GGCCT	1184
rPTH1	TGTGCTCAAC TTCATCTTCT TCATCAATAT CATCCGGGTG CTGCCAQA AGCTTCGGGA GACCAATGCG GGCCT	1187
mPTH1	TGTGCTCAAC TTCATCTTCT TCATCAATAT CATCCGGGTG CTGCCAQA AGCTTCGGGA GACCAATGCG GGCCT	1187
hPTH1	TGTGCTCAAC TTCATCTTCT TCATCAATAT CTTCCGGGTG CTGCCAQA AGCTTCGGGA GACCAATGCG GGCCT	1187
dPTH1	GTGTGACAGG GGCAGCAGT ACCGGAAGCT GCTCAATCC ACCTGGTGTC TCATGCCCTCTT TGGGTGTC CACTA	1259
rPTH1	GTGTGACACG AGGCAGCAGT ACCGGAAGCT GCTCAGGTCC ACCTGGTGTC TCATGCCCTCTT TGGGTGTC CACTA	1262
mPTH1	GTGTGACACG AGGCAGCAGT ACCGGAAGCT GCTCAGGTCC ACCTGGTGTC TCATGCCCTCTT TGGGTGTC CACTA	1262
hPTH1	GTGTGACACA GGCAGCAGT ACCGGAAGCT GCTCAATCC ACCTGGTGTC TCATGCCCTCTT TGGGTGTC CACTA	1262
dPTH1	CATCGTCTTC ATGGCCTTGC CTTACACCGA GGTCTCAGGG ACCTGTGGC AAGTCCAGAT GCATTAAGAG ATGCT	1334
rPTH1	CACCGTCTTC ATGGCCTTGC CTTACACCGA GGTCTCAGGG ACATTTGGC AGATCCAGAT GCATTAAGAG ATGCT	1337
mPTH1	CACCGTCTTC ATGGCCTTGC CTTACACCGA GGTCTCAGGG ACATTTGGC AGATCCAGAT GCATTAAGAG ATGCT	1337
hPTH1	CATTGCTTC ATGGCCTTGC CTTACACCGA GGTCTCAGGG ACCTGTGGC AAGTCCAGAT GCATTAAGAG ATGCT	1337
dPTH1	CTTCAACTCC TTCCAGGGAT TTTTGTGCG CATCATATAC TGTTCCTGCA ATGGGAGGT ACAGGAGAG ATTAA	1409
rPTH1	CTTCAACTCC TTCCAGGGAT TTTTGTGCG CATCATATAC TGTTCCTGCA ATGGGAGGT ACAGGAGAG ATTAA	1412
mPTH1	CTTCAACTCC TTCCAGGGAT TTTTGTGCG CATCATATAC TGTTCCTGCA ATGGGAGGT ACAGGAGAG ATTAA	1412
hPTH1	CTTCAACTCC TTCCAGGGAT TTTTGTGCG CATCATATAC TGTTCCTGCA ATGGGAGGT ACAGGAGAG ATTAA	1412
dPTH1	GAAATCTGG AGCCGCTGGA CACTGGCCTT GGACTTCAAG CGAAAGGC GAGTGGGAG TAGCAGTAT AGCTA	1484
rPTH1	GAAATCTGG AGCCGCTGGA CACTGGCCTT GGACTTCAAG CGAAAGGC GAGTGGGAG TAGCAGTAT AGCTA	1487
mPTH1	GAAATCTGG AGCCGCTGGA CACTGGCCTT GGACTTCAAG CGAAAGGC GAGTGGGAG TAGCAGTAT AGCTA	1487
hPTH1	GAAATCTGG AGCCGCTGGA CACTGGCCTT GGACTTCAAG CGAAAGGC GAGTGGGAG TAGCAGTAT AGCTA	1487
dPTH1	GGGCCAATG GTGTCTCACA CAAGTGTGAC CAATGTGGG CCCCCGTCAG GACTCAGCCT CCCCCTAGC CCCC	1559
rPTH1	TGGGCCAATG GTGTCTCACA CAAGTGTGAC CAATGTGGG CCCCCGTCAG GACTCAGCCT CCCCCTAGC CCCC	1562
mPTH1	TGGGCCAATG GTGTCTCACA CAAGTGTGAC CAATGTGGG CCCCCGTCAG GACTCAGCCT CCCCCTAGC CCCC	1562
hPTH1	GGGCCAATG GTGTCTCACA CAAGTGTGAC CAATGTGGG CCCCCGTCAG GACTCAGCCT CCCCCTAGC CCCC	1562
dPTH1	CCTGCTGCC GCCGCTGCC CCACCACCAC CGCCACACC AAGGCCAQC CCGGATGCC GGGCCACACC AAGCC	1634
rPTH1	CCT--GCT-----CC TGCCACACC AATGGCCAQT CCGAGCTGCC TGGCCATGCC AAGCC	1616
mPTH1	CCT--GCT-----CC TGCCACACC AATGGCCAQT CCGAGCTGCC TGGCCATGCC AAGCC	1616
hPTH1	CCTACTGCC-----AC TGCCACACC AAGGCCAQC CCGAGCTGCC TGGCCATGCC AAGCC	1619
dPTH1	AGGGGCTCG ACCCT-----CCCG-G-C CAGACCACCT CCAAGGCTG TCCCAAGGA CGATGGTTTC CTAA	1700
rPTH1	AGGGGCTCGA GCACTGAGA CT--GAAAC CCTACAGTC ACTATGGCGG TTCCCAAGGA CGATGGTTTC CTAA	1688
mPTH1	GGGCGCTCGA GCAATTGAGA AC--GAAAC CATAACAGTT ACTATGAGAG TTCCCAAGGA CGATGGTTTC CTAA	1688
hPTH1	AGGGGCTCGA GCACTGAGA CCTGAGAC CAGACCACCT CCAAGGCTG TCCCAAGGA CGATGGTTTC CTAA	1694
dPTH1	GGGCTCCTGC TCAGGCTGG ACAGGAGGC CTCGGGCTG GAGCGGCCAC CTGCTGCTT SCAGGAGAG TGGGA	1775
rPTH1	GGGCTCCTGC TCAGGCTGG ATGAGGAGGC CTCGGGCTT GAGCGGCCCG CTGCTGCTT SCAGGAGAG TGGGA	1763
mPTH1	TGGCTCCTGC TCAGGCTGG ATGAGGAGGC CTCGGGCTT GAGCGGCCAC CTGCTGCTT SCAGGAGAG TGGGA	1763
hPTH1	GGGCTCCTGC TCAGGCTGG ACAGGAGGC CTCGGGCTT GAGCGGCCAC CTGCTGCTT SCAGGAGAG TGGGA	1769
dPTH1	GACAGTCATG TGA	1788
rPTH1	AACAGTCATG TGA	1776
mPTH1	AACAGTCATG TGA	1776
hPTH1	GACAGTCATG TGA	1782

Figure 3

dPTH1	MGAVRIAP	GL	ALLLCCPVLS	SAYALVDADD	VMTKEEQIFL	LHRAQAQDCK	KLKEVIQRPA	IMESDKGWA	SASTSGKPK	EKASGK	TYPE	SHEDKEVPTG	100				
rPTH1	MGAAARIAP	L	ALLLCCPVLS	SAYALVDADD	VMTKEEQIFL	LHRAQAQDCK	KLKEVIJTA	NIMESDKGNT	PASTSGKPK	EKASGK	TYPE	SKENKDVPTG	100				
mPTH1	MGTARIAP	L	ALLLCCPVLS	SAYALVDADD	VMTKEEQIFL	LHRAQAQDCK	KLKEVIJTA	NIMESDKGNT	PASTSGKPK	EKASGK	TYPE	SKENKDVPTG	100				
hPTH1	MGTARIAP	GL	ALLLCCPVLS	SAYALVDADD	VMTKEEQIFL	LHRAQAQDCK	KLKEVIQRPA	SIMESDKGNT	SASTSGKPK	EKASGK	TYPE	SHEDKEVPTG	100				
dPTH1	SRHGRPCPL	EWON	ICWPL	GAPGEVVAVP	CPDYIYDFNH	KGHAYRRCDR	NGSWB	VPGH	NRTWANYSEC	MKFL	TNETRE	REVFDRLGMI	YTVGYS	VSLA	200		
rPTH1	SRHGRPCPL	EWON	ICWPL	GAPGEVVAVP	CPDYIYDFNH	KGHAYRRCDR	NGSWB	VPGH	NRTWANYSEC	MKFL	TNETRE	REVFDRLGMI	YTVGYS	VSLA	200		
mPTH1	SRHGRPCPL	EWON	ICWPL	GAPGEVVAVP	CPDYIYDFNH	KGHAYRRCDR	NGSWB	VPGH	NRTWANYSEC	MKFL	TNETRE	REVFDRLGMI	YTVGYS	VSLA	200		
hPTH1	SRHGRPCPL	EWON	ICWPL	GAPGEVVAVP	CPDYIYDFNH	KGHAYRRCDR	NGSWB	VPGH	NRTWANYSEC	MKFL	TNETRE	REVFDRLGMI	YTVGYS	VSLA	200		
dPTH1	SLTVAVLILA	YFRRHLHCTRN	YIHHM	LFLSF	MLRA	SIFVK	DAVLYSGATL	DEAERL	TEEE	URAIAC	APPP	PI	TAAG	GYAG	CRVAVTFFLY	FLATNYYWIL	299
rPTH1	SLTVAVLILA	YFRRHLHCTRN	YIHHM	NFLSF	MLRA	SIFVK	DAVLYSGFTL	DEAERL	TEEE	LHIJAC	VPPP	PA	AAAV	GYAG	CRVAVTFFLY	FLATNYYWIL	300
mPTH1	SLTVAVLILA	YFRRHLHCTRN	YIHHM	NFLSF	MLRA	SIFVK	DAVLYSGFTL	DEAERL	TEEE	LHIJAC	VPPP	PA	AAAV	GYAG	CRVAVTFFLY	FLATNYYWIL	300
hPTH1	SLTVAVLILA	YFRRHLHCTRN	YIHHM	LFLSF	MLRA	SIFVK	DAVLYSGATL	DEAERL	TEEE	URAIAC	APPP	PI	TAAG	GYAG	CRVAVTFFLY	FLATNYYWIL	300
dPTH1	VEGLYLHSLI	FMAFFSEKKY	LWGFT	IFGWG	LPAVFVAVVW	SVRATLANTG	CWDLSSG	HKK	WIIQVPILAS	IJVLN	FILFIN	IMRVLATKLR	ETNAGRCOTR	399			
rPTH1	VEGLYLHSLI	FMAFFSEKKY	LWGFT	IFGWG	LPAVFVAVVW	SVRATLANTG	CWDLSSG	HKK	WIIQVPILAS	IJVLN	FILFIN	IMRVLATKLR	ETNAGRCOTR	400			
mPTH1	VEGLYLHSLI	FMAFFSEKKY	LWGFT	IFGWG	LPAVFVAVVW	SVRATLANTG	CWDLSSG	HKK	WIIQVPILAS	IJVLN	FILFIN	IMRVLATKLR	ETNAGRCOTR	400			
hPTH1	VEGLYLHSLI	FMAFFSEKKY	LWGFT	IFGWG	LPAVFVAVVW	SVRATLANTG	CWDLSSG	HKK	WIIQVPILAS	IJVLN	FILFIN	IMRVLATKLR	ETNAGRCOTR	400			
dPTH1	QQYVRKLL	KST	LVLM	PLFGVH	YIVFMA	TPYT	EVSGTLWQ	IQ	MHYEML	FNSF	QGFFVAI	IYC	FCNGEVQAEI	KKSWSRWTLA	LDFKRRKARSG	SSSYSGPNV	499
rPTH1	QQYVRKLL	RST	LVLM	PLFGVH	YIVFMA	TPYT	EVSGTLWQ	IQ	MHYEML	FNSF	QGFFVAI	IYC	FCNGEVQAEI	RKSWSRWTLA	LDFKRRKARSG	SSSYSGPNV	500
mPTH1	QQYVRKLL	RST	LVLM	PLFGVH	YIVFMA	TPYT	EVSGTLWQ	IQ	MHYEML	FNSF	QGFFVAI	IYC	FCNGEVQAEI	RKSWSRWTLA	LDFKRRKARSG	SSSYSGPNV	500
hPTH1	QQYVRKLL	KST	LVLM	PLFGVH	YIVFMA	TPYT	EVSGTLWQ	IQ	MHYEML	FNSF	QGFFVAI	IYC	FCNGEVQAEI	KKSWSRWTLA	LDFKRRKARSG	SSSYSGPNV	500
dPTH1	SHTSVTNVGP	RAGUL	PLSP	RLUPAT	-----	-----	-----	-----	-----	-----	-----	-----	-----	AS	PERPPAL	LQEEWETVM	595
rPTH1	SHTSVTNVGP	RAGUL	PLSP	RLUPAT	-----	-----	-----	-----	-----	-----	-----	-----	-----	AS	PERPPAL	LQEEWETVM	591
mPTH1	AHTSVTNVGP	RAGUL	PLSP	RLUPAT	-----	-----	-----	-----	-----	-----	-----	-----	-----	AS	PERPPAL	LQEEWETVM	591
hPTH1	SHTSVTNVGP	RAGUL	PLSP	RLUPAT	-----	-----	-----	-----	-----	-----	-----	-----	-----	AS	PERPPAL	LQEEWETVM	593

Seq. ID No. 2A dPTH1; Seq. ID No. 2B rPTH1; Seq. ID No. 2C mPTH1 and Seq. ID No. 2D hPTH1.

Figure 4

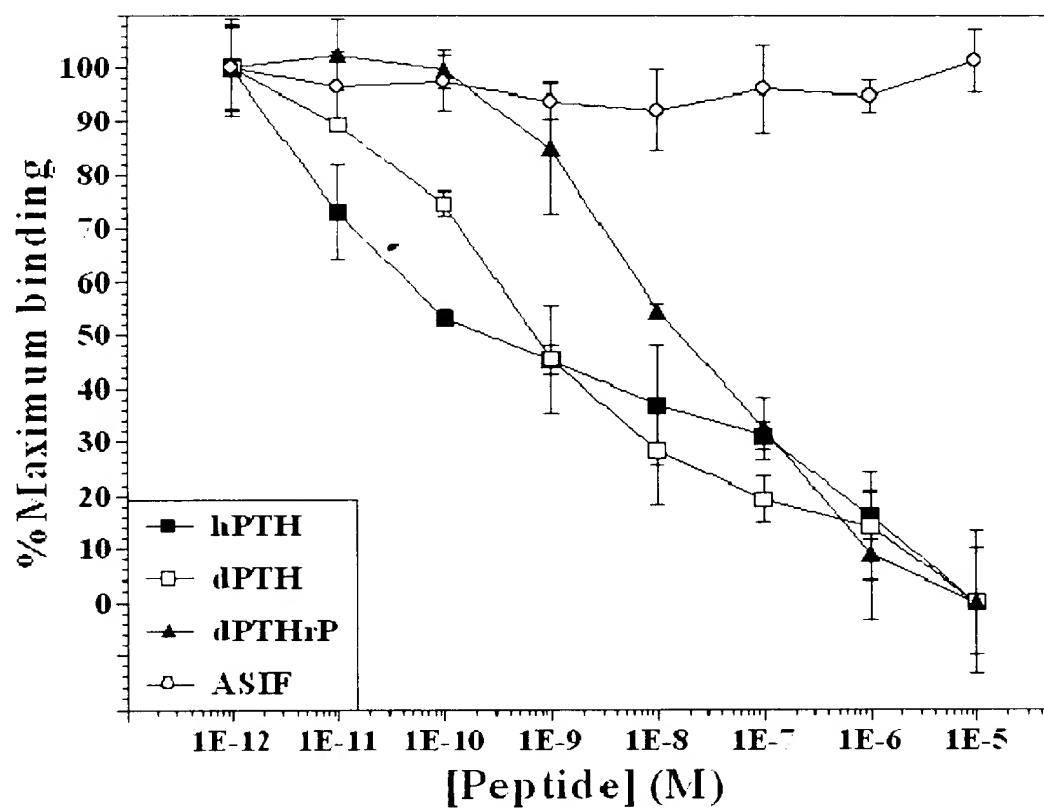


Figure 5

